Claims

1. Substitution derivatives of N⁶-benzyladenosine of the general formula I

and their pharmaceutically acceptable salts with alkali metals, ammonium or amines, wherein

I

R2 is hydrogen atom, hydroxyl, halogen, alkoxy, amino, hydrazo, mercapto, methylmercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl or carbamoyl group, and

(R1)_n, wherein

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n is 2 - 6 carbon atoms of the phenyl ring optionally substituted with one to five substituents selected from the group R1 wherein

R1 is hydrogen, hydroxyl, halogen, alkoxy, amino, hydrazo, mercapto, methylmercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl or carbamoyl alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, cycloalkyl, arylalkyl, heteroalkyl, heteroarylalkyl, cycloheteroalkyl alkyl or R1'-X, wherein

X is NH-,
$$-N(C_1-C_6-alkyl)$$
-, $-O$ - or $-S$ - and

R1' is hydrogen, alkyl, substituted alkyl, acyl, amido, sulpho, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heterocycle, heteroaryl, substituted heteroaryl, arylalkyl, cycloheteroalkyl, substituted cycloheteroalkyl, heteroarylalkyl, heteroalkyl, cycloalkyl alkyl and cycloheteroalkyl alkyl;

whereas the generic substituent groups have meanings identical with the definitions of the corresponding groups as defined in this legend, wherein halogen refers to

halogen atom selected from the group containing fluorine atom, bromine atom, chlorine atom and iodine atom,

alkyl refers to

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branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms, branched or unbranched alkynyl chain containing 2 to 6 carbon atoms,

substituted alkyl refers to

branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

carbyloxy refers to

group -OR_a, wherein R_a is alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, cycloalkyl, substituted cycloalkyl, cycloheteroalkyl or substituted cycloheteroalkyl, wherein mentioned generic substituent groups have meanings as defined in this legend,

carbylmercapto refers to

group -SR_b, wherein R_b is alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, cycloalkyl, substituted cycloalkyl, cycloheteroalkyl or substituted cycloheteroalkyl, wherein mentioned generic substituent groups have meanings as defined in this legend,

sulpho refers to -SO₃R_c, wherein R_c is

hydrogen atom H,

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branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms,

branched or unbranched alkynyl chain containing 2 to 6 carbon atoms,

branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

sulphamido refers to -NHSO₃R_d, wherein R_d is

hydrogen atom H,

branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms, branched or unbranched alkynyl chain containing 2 to 6 carbon atoms, branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend.

25 acyl refers to

group -C(O)R_e, wherein R_e is hydrogen atom, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, cycloalkyl, substituted cycloalkyl, wherein mentioned generic substituent groups have meanings as defined in this legend,

30 aryloxy refers to

group -OAr, wherein Ar is aryl, substituted aryl, heteroaryl or substituted heteroaryl, wherein mentioned generic substituent groups have meanings as defined in this legend,

alkylamino refers to

group NR_fR'_g, wherein R_f and R'_g are independently one of another hydrogen atom, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl or substituted heteroaryl, wherein mentioned generic substituent groups have meanings as defined in this legend,

amido refers to

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group -C(O)NR_hR'_i, wherein R_h and R'_i are independently one of another hydrogen atom, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl or substituted heteroaryl, wherein mentioned generic substituent groups have meanings as defined in this legend,

carboxyl refers to

group $-C(O)OR_j$, wherein R_j is hydrogen atom, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl or substituted heteroaryl, wherein mentioned generic substituent groups have meanings as defined in this legend,

carbamino refers to

group -NHCOR_k, wherein R_kis hydrogen atom, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl or substituted heteroaryl, wherein mentioned generic substituent groups have meanings as defined in this legend,

aryl refers to

aromatic carbocyclic group containing 6 to 18 carbon atoms, which is formed by at least one aromatic ring (e.g. phenyl or biphenyl) or multiple condensed rings, from which at least one ring is aromatic (e.g. 1,2,3,4-tetrahydronaphtyl, naphtyl, anthryl or phenanthryl),

substituted aryl refers to

aromatic carbocyclic group containing 6 to 18 carbon atoms, which is formed by at least one aromatic ring (e.g. phenyl or biphenyl) or multiple condensed rings, from which at least one ring is aromatic (e.g. 1,2,3,4-tetrahydronaphtyl, naphtyl, anthryl or phenanthryl), which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino,

hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

5 heterocycle refers to

heterocyclic group containing 4 to 9 carbon atoms and at least on heteroatom selected from the group containing oxygen atom, sulphur atom and nitrogen atom,

heteroaryl refers to

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heterocyclic group containing 4 to 9 carbon atoms and at least one heteroatom selected from the group containing oxygen atom, sulphur atom and nitrogen atom, wherein at least one ring is aromatic,

substituted heteroaryl refers to

heterocyclic group containing 4 to 9 carbon atoms and at least one heteroatom selected from the group containing oxygen atom, sulphur atom and nitrogen atom, wherein at least one ring is aromatic, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

arylalkyl refers to

group -Rl-Ar, wherein Ar refers toaryl group and R_l is branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms, branched or unbranched alkynyl chain containing 2 to 6 carbon atoms, aromatic carbocyclic group containing 6 to 18 carbon atoms, which is formed by at least one aromatic ring (e.g. phenyl or biphenyl) or multiple condensed rings, from which at least one ring is aromatic (e.g. 1,2,3,4-tetrahydronaphtyl, naphtyl, anthryl or phenanthryl),which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido,

acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

heteroalkyl refers to

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group -R_m-L, wherein R_m is

branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms, branched or unbranched alkynyl chain containing 2 to 6 carbon atoms, branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

and L is

heterocyclic group containing 4 to 9 carbon atoms and at least one heteroatom selected from the group containing oxygen atom, sulphur atom and nitrogen atom, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

25 heteroarylalkyl refers to

group -R_n-G, wherein R_n is

branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms, branched or unbranched alkynyl chain containing 2 to 6 carbon atoms,

branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto,

carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylamino, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

and G is

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heterocyclic group containing 4 to 9 carbon atoms and at least one heteroatom selected from the group containing oxygen atom, sulphur atom and nitrogen atom, wherein at least one ring is aromatic, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

cycloalkyl refers to

monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, substituted cycloalkyl refers to

monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

heterocycloalkyl refers to

monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, in whose cyclic structure is at least one carbon atom replaced by heteroatom from the group containing oxygen atom, sulphur atom, nitrogen atom and phosphorus atom,

substituted cycloheteroalkyl refers to

monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, in whose cyclic structure is at least one carbon atom replaced by heteroatom from the group containing oxygen atom, sulphur atom, nitrogen atom and phosphorus atom, which is optionally substituted with one to five substituents selected from

the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylamino, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

cycloalkylalkyl refers to

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group -R_o-J, wherein R_o is

branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms,

branched or unbranched alkynyl chain containing 2 to 6 carbon atoms,

branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

and J is

monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, or monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylamino, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

and heterocycloalkylalkyl refers to

group -R_pV, wherein R_p is

branched or unbranched alkyl chain containing 1 to 6 carbon atoms, branched or unbranched alkenyl chain containing 2 to 6 carbon atoms,

branched or unbranched alkynyl chain containing 2 to 6 carbon atoms, branched or unbranched alkyl, alkenyl and alkynyl chain containing 1 to 6 carbon atoms, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

and V is

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monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, in whose cyclic structure is at least one carbon atom replaced by heteroatom from the group containing oxygen atom, sulphur atom, nitrogen atom and phosphorus atom,

monocyclic or polycyclic alkyl group containing 3 to 15 carbon atoms, in whose cyclic structure is at least one carbon atom replaced by heteroatom from the group containing oxygen atom, sulphur atom, nitrogen atom and phosphorus atom, which is optionally substituted with one to five substituents selected from the group containing hydroxyl, alkoxy, amino, hydrazo, mercapto, carboxyl, cyano, nitro, amido, sulpho, sulphamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl and carbamoyl group, wherein mentioned generic substituent groups have meanings as defined in this legend,

in the form of racemates or optically active isomers, as well as their addition salts with acids.

2. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, selected from the group comprising 6-(2-fluorobenzylamino)purine riboside, 6-(3-fluorobenzylamino)purine riboside, 6-(4-fluorobenzylamino)purine riboside, 6-(2bromobenzylamino)purine riboside, 6-(4bromobenzylamino)purine riboside, 6-(2-iodobenzylamino)purine riboside, 6-(3iodobenzylamino)purine riboside, 6-(4-iodobenzylamino)purine riboside, 6-(2chlorobenzylamino)purine riboside, 6-(2-chlorobenzylamino)purine riboside, 6-(3chlorobenzylamino)purine riboside, 6-(4-chlorobenzylamino)purine riboside, 6-(2acetylbenzylamino)purine riboside, 6-(3-acetylbenzylamino)purine riboside, 6-(4acetylbenzylamino)purine riboside, 6-(3-carboxybenzylamino)purine riboside, 6-(4-

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carboxybenzylamino)purine riboside, 6-(2-acetoxybenzylamino)purine riboside, 6-(3acetoxybenzylamino)purine riboside, 6-(4-acetoxybenzylamino)purine riboside, 6-(2nitrobenzylamino)purine riboside, 6-(3-nitrobenzylamino)purine riboside, 6-(4nitrobenzylamino)purine riboside, 6-(2-sulphobenzylamino)purine riboside, 6-(3sulphoobenzylamino)purine riboside, 6-(4-sulphobenzylamino)purine riboside, 6-(2cyanobenzylamino)purine riboside, 6-(4cyanobenzylamino)purine riboside, 6-(5-nitro-2-methylbenzylamino)purine riboside, 6-(2-methylbenzylamino)purine riboside, 6-(3-methylbenzylamino)purine riboside, 6-(4methylbenzylamino)purine riboside, 6-(4-methylaminobenzylamino)purine riboside, 6-(2-methoxybenzylamino)purine riboside, 6-(3-methoxybenzylamino)purine riboside, 6-(4-methoxybenzylamino)purine riboside, 6-(2-hydroxybenzylamino)purine riboside, 6-(3-hydroxybenzylamino)purine riboside, 6-(4-hydroxybenzylamino)purine riboside, 6-(4-hexylbenzylamino)purine riboside, 6-(4-hexyloxybenzylamino)purine riboside, 6-(2formylbenzylamino)purine riboside, 6-(3-formylbenzylamino)purine riboside, 6-(4formylbenzylamino)purine riboside, 6-(2-ethoxybenzylamino)purine riboside, 6-(3ethoxybenzylamino)purine riboside, 6-(4-ethoxybenzylamino)purine riboside, 6-(4ethylbenzylamino)purine riboside, 6-(4-pentylbenzylamino)purine riboside, 6-(4pentyloxybenzylamino)purine riboside, 6-(4-phenoxybenzylamino)purine riboside, 6-(4phenylbenzylamino)purine riboside, 6-(4-propylbenzylamino)purine riboside, 6-(4propyloxybenzylamino)purine riboside, 6-(4-octylbenzylamino)purine riboside, 6-(4-octylbenzylami octyloxybenzylamino)purine riboside, 6-(4-ethyloxybenzylamino)purine riboside, 6-(3,4-diacetoxybenzylamino)purine riboside, 6-(3,5-diacetoxybenzylamino)purine 6-(2,5-diaminobenzylamino)purine 6 - (3,5 riboside, riboside, dibromobenzylamino)purine riboside, 6-(3,5-dibromo-4-methoxybenzylamino)purine riboside, 6-(2,3-dichlorobenzylamino)purine riboside, 6-(2,4dichlorobenzylamino)purine riboside, 6-(2,5-dichlorobenzylamino)purine riboside, 6-(2,6-dichlorobenzylamino)purine riboside, 6-(3,4-dichlorobenzylamino)purine riboside, 6-(3,5-dichlorobenzylamino)purine riboside, 6-(2,3,4,5-tetrafluorobenzylamino)purine 6-(2-chloro-3,6-difluorobenzylamino)purine riboside. riboside, 6-(5-chloro-2fluorobenzylamino)purine riboside, 6-(2,3,4-trifluorobenzylamino)purine riboside, 6-6-(2,4,5-trifluorobenzylamino)purine (2,3,5-trifluorobenzylamino)purine riboside, riboside. 6-(3,4,5-trifluorobenzylamino)purine riboside. 6-(2,3,6-

6-(3-chloro-2,6-difluorobenzylamino)purine trifluorobenzylamino)purine riboside, 6-(2-chloro-6-fluorobenzylamino)purine riboside, 6-(2,6riboside. difluorobenzylamino)purine riboside, 6-(2,4-difluorobenzylamino)purine riboside, 6-(3,4-difluorobenzylamino)purine riboside, 6-(2,5-difluorobenzylamino)purine riboside, 6-(3,5-difluorobenzylamino)purine riboside, 6-(5-fluoro-2-5 (trifluoromethyl)benzylamino)purine 6-(4-fluoro-2riboside, (trifluoromethyl)benzylamino)purine riboside, 6-(2-chloro-5-(trifluoromethyl)benzylamino)purine riboside, 6-(2-6-(3-(difluoromethoxy)benzylamino)purine riboside, riboside, 6-(4-10 (difluoromethoxy)benzylamino)purine (difluoromethoxy)benzylamino)purine riboside, 6-(2-fluoro-5- · 6-(3-fluoro-4-(trifluoromethyl)benzylamino)purine riboside, 6-(2-fluoro-4-(trifluoromethyl)benzylamino)purine riboside, (trifluoromethyl)benzylamino)purine riboside, 6-(2-(trifluoromethylthio)benzylamino)purine riboside, 6-(2-fluoro-3-15 6-(2-chloro-6-fluoro-3-(trifluoromethyl)benzylamino)purine riboside, methylbenzylamino)purine purine riboside, 6-(6-chloro-2-fluoro-3methylbenzylamino)purine riboside, 6-(3-chloro-2-fluoro-5-(trifluoromethyl)benzylamino)purine riboside, 6-(3-chloro-2-fluoro-6-(trifluoromethyl)benzylamino)purine riboside, 6-(2,3-difluoro-4-20 methylbenzylamino)purine 6-(2,6-difluoro-3-methylbenzylamino)purine riboside, riboside, 6-(2-fluoro-6-(trifluoromethyl)benzylamino)purine riboside, 6-(3-chloro-2,6difluorobenzylamino)purine riboside, 6-(3-(trifluoromethylthio)benzylamino)purine riboside, 6-(3-fluoro-4-methyl benzylamino)purine riboside, 25 6-(4-fluoro-3-methylbenzylamino)purine riboside, 6-(5-fluoro-2methylbenzylamino)purine riboside, 6-(2-chloro-3,6-difluorobenzylamino)purine riboside, 6-(4-(trifluoromethylthio)benzylamino)purine riboside, 6-(3-fluoro-5-(trifluoromethyl)benzylamino)purine riboside, 6-(2-chloro-4-fluorobenzylamino)purine riboside. 6-(2-(trifluoromethoxy)benzylamino)purine riboside, 6-(3-(trifluoromethyl)benzylamino)purine riboside, 6-(2-30 (trifluoromethyl)benzylamino)purine riboside, 6-(4-(trifluoromethyl)benzylamino)purine riboside, 6-(4-chloro-3-(trifluoromethyl)

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6-(4-fluoro-3-(trifluoromethyl)benzylamino)purine benzylamino)purine riboside, 6-(3,5-bis(trifluoromethyl)benzylamino)purine riboside, 6-(3riboside. 6-(4-(trifluoromethoxy)benzylamino)purine riboside, (trifluoromethoxy)benzylamino)purine riboside. 6-(4-(trifluoromethyl)benzylamino)purine riboside, 6-(4-diethylaminobenzylamino)purine riboside, 6-(3,4-dihydroxybenzylamino)purine riboside, 6-(3,5dihydroxybenzylamino)purine riboside, 6-(3,4-dihydroxybenzylamino)purine riboside, 6-(2,3-ethylenedioxybenzylamino)purine riboside, 6-(2,4-dihydroxybenzylamino)purine, 6-(2,5-dihydroxybenzylamino)purine riboside, 6-(2,6-dihydroxybenzylamino)purine 6-(3,4riboside. 6-(3,4-dimethoxybenzylamino)purine riboside, dimethoxybenzylamino)purine riboside, 6-(3,5-dimethoxybenzylamino)purine riboside, 6-(2,3-dimethoxybenzylamino)purine riboside, 6-(2,4-dimethoxybenzylamino)purine riboside, 6-(2,5-dimethoxybenzylamino)purine riboside, 6-(2,6dimethoxybenzylamino)purine riboside, 6-(2-hydroxy-3-methoxybenzylamino)purine riboside, 6-(2-hydroxy-4-methoxybenzylamino)purine riboside, 6-(2-hydroxy-5methoxybenzylamino)purine riboside, 6-(2-hydroxy-6-methoxybenzylamino)purine riboside, 6-(3-hydroxy-2-methoxybenzylamino)purine riboside, 6-(3-hydroxy-4methoxybenzylamino)purine riboside, 6-(3-hydroxy-5-methoxybenzylamino)purine riboside, 6-(3-hydroxy-6-methoxybenzylamino)purine riboside, 6-(4-hydroxy-2methoxybenzylamino)purine riboside, 6-(4-hydroxy-3-methoxybenzylamino)purine riboside. 6-(4-hydroxy-5-methoxybenzylamino)purine riboside, 6-(4-hydroxy-6methoxybenzylamino)purine riboside, 6-(2-hydroxy-3,4-dimethoxybenzylamino)purine riboside, 6-(2-hydroxy-3,5-dimethoxybenzylamino)purine riboside, 6-(2-hydroxy-3,6dimethoxybenzylamino)purine riboside, 6-(2-hydroxy-4,5dimethoxybenzylamino)purine riboside, 6-(2-hydroxy-4,6dimethoxybenzylamino)purine 6-(2-hydroxy-5,6riboside. dimethoxybenzylamino)purine 6-(3-hydroxy-4,5riboside, dimethoxybenzylamino)purine riboside, 6-(3-hydroxy-4,6dimethoxybenzylamino)purine riboside, 6-(3-hydroxy-2,4dimethoxybenzylamino)purine riboside, 6-(3-hydroxy-2,5-6-(3-hydroxy-2,6dimethoxybenzylamino)purine riboside, dimethoxybenzylamino)purine riboside, 6-(4-hydroxy-2,3-

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dimethoxybenzylamino)purine riboside, 6-(4-hydroxy-2,5-6-(4-hydroxy-2,6dimethoxybenzylamino)purine riboside. 6-(4-hydroxy-3,5dimethoxybenzylamino)purine riboside, dimethoxybenzylamino)purine riboside, 6-(4-hydroxy-3,6-6-(2,3-dihydroxy-4riboside. dimethoxybenzylamino)purine methoxybenzylamino)purine riboside, 6-(2,3-dihydroxy-5-methoxybenzylamino)purine riboside, 6-(2,3-dihydroxy-6-methoxybenzylamino)purine riboside, 6-(2,4-dihydroxy-3methoxybenzylamino)purine riboside, 6-(2,4-dihydroxy-5-methoxybenzylamino)purine riboside, 6-(2,4-dihydroxy-6-methoxybenzylamino)purine riboside, 6-(2,5-dihydroxy-3methoxybenzylamino)purine riboside, 6-(2,5-dihydroxy-4-methoxybenzylamino)purine riboside, 6-(2,5-dihydroxy-6-methoxybenzylamino)purine riboside, 6-(2,6-dihydroxy-3methoxybenzylamino)purine riboside, 6-(2,6-dihydroxy-4-methoxybenzylamino)purine riboside, 6-(2,6-dihydroxy-5-methoxybenzylamino)purine riboside, 6-(3,4-dihydroxy-2methoxybenzylamino)purine riboside, 6-(3,4-dihydroxy-5-methoxybenzylamino)purine riboside, 6-(3,4-dihydroxy-6-methoxybenzylamino)purine riboside, 6-(3,5-dihydroxy-2methoxybenzylamino)purine riboside, 6-(3,5-dihydroxy-4-methoxybenzylamino)purine 6-(2,3,4riboside, 6-(3,5-dihydroxy-6-methoxybenzylamino)purine riboside, trimethoxybenzylamino)purine 6-(2,4,5-trimethoxybenzylamino)purine riboside, riboside, 6-(2,4,6-trimethoxybenzylamino)purine riboside, 6-(3,4,5trimethoxybenzylamino)purine riboside, 6-(2-hydroxy-3,4,5trimethoxybenzylamino)purine riboside, 6-(2-hydroxy-3,4,6trimethoxybenzylamino)purine riboside, 6-(2-hydroxy-4,5,6trimethoxybenzylamino)purine riboside, 6-(2,4,6-trimethoxybenzylamino)purine riboside, 6-(2,3,4-trihydroxybenzylamino)purine riboside. 6-(2.4.6trihydroxybenzylamino)purine riboside, 6-(2,3,4-trihydroxybenzylamino)purine riboside, 6-(3,4,5-trihydroxybenzylamino)purine riboside, 6-(2,4,6trihydroxybenzylamino)purine riboside, 6-(2-hydroxy-3-chlorobenzylamino)purine riboside, 6-(2-hydroxy-4-chlorobenzylamino)purine riboside, 6-(2-hydroxy-5chlorobenzylamino)purine riboside, 6-(2-hydroxy-6-chlorobenzylamino)purine riboside, 6-(2-hydroxy-3-iodobenzylamino)purine riboside, 6-(2-hydroxy-4iodobenzylamino)purine riboside, 6-(2-hydroxy-5-iodobenzylamino)purine riboside, 6-(2-hydroxy-6-iodobenzylamino)purine riboside, 6-(2-hydroxy-3-

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bromobenzylamino)purine riboside, 6-(2-hydroxy-4-bromobenzylamino)purine riboside, 6-(2-hydroxy-5-bromobenzylamino)purine riboside, 6-(2-hvdroxv-6bromobenzylamino)purine riboside, 6-(2-hydroxy-3-fluorobenzylamino)purine riboside, 6-(2-hydroxy-4-fluorobenzylamino)purine riboside, 6-(2-hydroxy-5fluorobenzylamino)purine riboside, 6-(2-hydroxy-6-fluorobenzylamino)purine riboside, 6-(2-hydroxy-4-6-(2-hydroxy-3-methylbenzylamino)purine riboside, methylbenzylamino)purine riboside, 6-(2-hydroxy-5-methylbenzylamino)purine riboside, 6-(2-hydroxy-6-methylbenzylamino)purine riboside, 6-(2,3-dihydroxy-4riboside, chlorobenzylamino)purine 6-(2,3-dihydroxy-5-chlorobenzylamino)purine riboside, 6-(2,5-dihydroxy-4-chlorobenzylamino)purine riboside, 6-(2,6-dihydroxy-4chlorobenzylamino)purine riboside, 6-(2,6-dihydroxy-4-bromoxybenzylamino)purine riboside, 6-(2,6-dihydroxy-4-iodobenzylamino)purine riboside, 6-(2,6-dihydroxy-3chlorobenzylamino)purine riboside, 6-(2,6-dihydroxy-3-bromobenzylamino)purine riboside, 6-(2,6-dihydroxy-3-iodobenzylamino)purine riboside, 6-(2,6-dihydroxy-3fluorobenzylamino)purine riboside, 6-(2,6-dihydroxy-3,5-dichlorobenzylamino)purine riboside, 6-(2,6-dihydroxy-3,5-dibromobenzylamino)purine riboside, 6-(2,6-dihydroxy-3,5-diiodobenzylamino)purine 6-(2,6-dihydroxy-3,5riboside, difluorobenzylamino)purine 6-(4,5-dimethoxy-2-nitrobenzylamino)purine riboside, riboside, 6-(3,4-dimethylbenzylamino)purine riboside, 6-(2,3dimethylbenzylamino)purine riboside, 6-(2,4-dimethylbenzylamino)purine riboside, 6-(2,6-dimethylbenzylamino)purine riboside, 6-(2,6-dimethyl-4hydroxybenzylamino)purine riboside, 6-(3,5-dimethyl-4-hydroxybenzylamino)purine riboside, 6-(2-fluoro-4-hydroxybenzylamino)purine riboside, 6-(3-fluoro-4methylbenzylamino)purine riboside, 6-(3,4-dinitrobenzylamino)purine riboside, 6-(3,5dinitrobenzylamino)purine riboside, 6-(2-methyl-5-nitrobenzylamino)purine riboside, 6-(3-methyl-4-nitrobenzylamino)purine riboside, 6-(3,4-diiodo-4hydroxybenzylamino)purine riboside, 6-(2-chloro-3,4-dimethoxybenzylamino)purine riboside, 6-(4-chloro-3,5-dinitrobenzylamino)purine riboside, 6-(2-chloro-4fluorobenzylamino)purine riboside, 6-(3-chloro-4-fluorobenzylamino)purine riboside, 6-(2-chloro-6-methylbenzylamino)purine riboside. 6-(3-chloro-2methylbenzylamino)purine riboside, 6-(3-chloro-4-methylbenzylamino)purine riboside, 6-(5-chloro-2-methoxybenzylamino)purine 6-(2-chloro-4riboside,

fluorobenzylamino)purine riboside, 6-(4-chloromethylbenzylamino)purine riboside, 6-(2-chloro-5-nitrobenzylamino)purine riboside, 6-(2-chloro-6-nitrobenzylamino)purine riboside, 6-(5-chloro-2-6-(4-chloro-3-nitrobenzylamino)purine riboside, nitrobenzylamino)purine riboside, 6-(3-bromo-4-hydroxybenzylamino)purine riboside, 6-(3.5-dibromo-4-hydroxybenzylamino)purine, 6-(3-bromo-4methoxybenzylamino)purine, 6-(4-bromomethylbenzylamino)purine riboside, 6-(4butoxybenzylamino)purine riboside, 6-(4-butoxybenzylamino)purine riboside, 6-(4-/tbutyl/benzylamino)purine 6-(4-t-butyl-2,6-dimethylbenzylamino)purine riboside, riboside, 6-(2-aminobenzylamino)purine riboside, 6-(3-aminobenzylamino)purine riboside. 6-(4-aminobenzylamino)purine riboside, 6-(2-amino-3chlorobenzylamino)purine riboside, 6-(2-amino-4-chlorobenzylamino)purine riboside, 6-(2-amino-6-6-(2-amino-5-chlorobenzylamino)purine riboside, chlorobenzylamino)purine riboside, 6-(3-amino-2-chlorobenzylamino)purine riboside, 6-(3-amino-4-chlorobenzylamino)purine riboside, 6-(3-amino-5chlorobenzylamino)purine riboside, 6-(3-amino-6-chlorobenzylamino)purine riboside, 6-(2,6-diamino-3-chlorobenzylamino)purine riboside, 6-(2,6-diamino-4chlorobenzylamino)purine riboside, 6-(4-amino-3-chlorobenzylamino)purine riboside, 6-(4-amino-5-dichlorobenzylamino)purine riboside, 6-(5-amino-2methylbenzylamino)purine riboside, 6-(2-amino-3-nitrobenzylamino)purine riboside, 6-(4-amino-3-nitrobenzylamino)purine riboside, 6-(4-benzyloxybenzylamino)purine riboside, 6-(3-acetylbenzylamino)purine riboside, 6-(2-acetylbenzylamino)purine riboside, 6-(2,4,5-trichlorobenzylamino)purine riboside, 6-(2,4,5trichlorobenzylamino)purine riboside, 6-(2,4,6-trichlorobenzylamino)purine riboside, 6-6-(2,3,5-trichlorobenzylamino)purine (2,3,4-trichlorobenzylamino)purine riboside, riboside, 6-(2,3,6-trichlorobenzylamino)purine riboside, 6-(2,5,6trichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-fluorobenzylamino)purine riboside, 2hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-bromobenzylamino)purine riboside, 2-

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bromo, methyl or methylmercapto)-6-(4fluoro, (amino, hydroxy, chloro, bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-iodobenzylamino)purine riboside, 2hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-(amino, iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3chlorobenzylamino)purine riboside, 6-(4-chlorobenzylamino)purine riboside, 2-(amino, methyl methylmercapto)-6-(2hydroxy, chloro, fluoro, bromo, or acetylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-acetylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-acetylbenzylamino)purine riboside, 2hydroxy, (amino. chloro, fluoro, bromo, methyl or methylmercapto)-6-(3carboxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(4-carboxybenzylamino)purine riboside, 6-(2or acetoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-acetoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-acetoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2sulphobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-sulphoobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-sulphobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2cyanobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-cyanobenzylamino)purine riboside, 6-(4cyanobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or

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methylmercapto)-6-(5-nitro-2-methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3methylbenzylamino)purine riboside, 6-(4-methylbenzylamino)purine riboside, 2-(amino, bromo, fluoro, methyl or methylmercapto)-6-(4hydroxy, chloro, methylaminobenzylamino)purine riboside, 6-(2-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hexylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4hexyloxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-formylbenzylamino)purine riboside, 2-(amino, hydroxy, methylmercapto)-6-(3chloro, fluoro, bromo, methyl or formylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-formylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-ethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3ethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-ethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-ethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4penthylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-penthyloxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-phenoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4phenylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-propylbenzylamino)purine riboside, 2-(amino, hydroxy,

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chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-propyloxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4oktylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-octyloxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-ethyloxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4diacetoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-diacetoxybenzylamino)purine riboside, 6-(2,5diaminobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dibromobenzylamino)purine riboside, 2-(amino, hydroxy, methylmercapto)-6-(3,5-dibromo-4chloro, fluoro, bromo, methyl or methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5dichlorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2,3,4,5-tetrafluorobenzylamino)purine riboside, 2-(amino, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-3,6hydroxy, difluorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(5-chloro-2-fluorobenzylamino)purine riboside. 2-(amino. hydroxy, methyl methylmercapto)-6-(2,3,4chloro, fluoro, bromo, or trifluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3,5-trifluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4,5-trifluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4,5-trifluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3,6-trifluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-chloro-2,6-

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difluorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2-chloro-6-fluorobenzylamino)purine riboside. 2-(amino, hydroxy, fluoro, methyl methylmercapto)-6-(2,6chloro, bromo, or difluorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-difluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-difluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5difluorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-difluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(5-fluoro-2or (trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-fluoro-2-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2chloro-5-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-(difluoromethoxy)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-(difluoromethoxy)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-(difluoromethoxy)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-fluoro-5-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-fluoro-4-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2fluoro-4-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-(trifluoromethylthio)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-fluoro-3-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2chloro-6-fluoro-3-methylbenzylamino)purine purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(6-chloro-2-fluoro-3methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-chloro-2-fluoro-5-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-

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chloro-2-fluoro-6-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo. methyl or methylmercapto)-6-(2,3-difluoro-4methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-difluoro-3-methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro. fluoro. bromo. methyl or methylmercapto)-6-(2-fluoro-6-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, methylmercapto)-6-(3-chloro-2,6-difluorobenzylamino)purine methyl or riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-(trifluoromethylthio)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-fluoro-4-methyl benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-fluoro-3methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(5-fluoro-2-methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-3,6difluorobenzylamino) puri riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-(trifluoromethylthio)benzylamino)purine riboside. 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-fluoro-5-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-4-fluorobenzylamino)purine riboside, 2fluoro, (amino, hydroxy, chloro, bromo, methyl or methylmercapto)-6-(2-(trifluoromethoxy)benzylamino)purine riboside, 6-(3-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-chloro-3-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4fluoro-3-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(3,5or bis(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(3-(trifluoromethoxy)benzylamino)purine or riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-

(trifluoromethoxy)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-(trifluoromethyl)benzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4diethylaminobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5dihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3ethylenedioxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dihydroxybenzylamino)purine, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5-dihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6dihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(3,4or dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2,3or dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2,5or dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-5methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-2methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl

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or methylmercapto)-6-(3-hydroxy-4-methoxybenzylamino)purine riboside, 2-(amino, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-5methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-2methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-3-methoxybenzylamino)purine riboside, 2-(amino, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-5methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3,4dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3,5-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3,6dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4,5-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4,6dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-5,6-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-4,5dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-4,6-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-2,4dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-2,5-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-hydroxy-2,6dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-2,3-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-2,5dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-2,6-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-3,5-

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dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-hydroxy-3,6-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dihydroxy-4-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dihydroxy-5-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dihydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dihydroxy-3-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dihydroxy-5-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dihydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5-dihydroxy-3-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5-dihydroxy-4-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5-dihydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-4-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-5-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dihydroxy-2-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dihydroxy-5-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dihydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dihydroxy-2-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dihydroxy-4-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dihydroxy-6-methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3,4trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4,5-trimethoxybenzylamino)purine riboside, 2-(amino,

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methyl methylmercapto)-6-(2,4,6hydroxy, chloro, fluoro, bromo, or trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4,5-trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3,4,5trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3,4,6-trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4,5,6-trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4,6-trimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3,4trihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4,6-trihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, methyl methylmercapto)-6-(2,3,4fluoro, bromo, or trihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4,5-trihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2,4,6or trihydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-5-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-6chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3-iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-5-iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-6iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3-bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl

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methylmercapto)-6-(2-hydroxy-5-bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-6bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3-fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4fluorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-5-fluorobenzylamino)purine riboside. 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-6fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-3-methylbenzylamino)purine riboside. 2-(amino. hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-4methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-5-methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-hydroxy-6methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dihydroxy-4-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dihydroxy-5chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5-dihydroxy-4-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-4chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-4-bromoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-4iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3-chlorobenzylamino)purine riboside, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3bromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3-iodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3,5-dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3,5-

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dibromobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3,5-diiodobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dihydroxy-3,5difluorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4,5-dimethoxy-2-nitrobenzylamino)purine riboside, 2-(amino, methyl or methylmercapto)-6-(3,4hydroxy, chloro, fluoro, bromo, dimethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3-dimethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4-dimethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6dimethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-dimethyl-4-hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dimethyl-4hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2-fluoro-4-hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, methyl or methylmercapto)-6-(3-fluoro-4fluoro, bromo, methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-dinitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dinitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2methyl-5-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-methyl-4-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,4-diiodo-4hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-3,4-dimethoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-chloro-3,5dinitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2-chloro-4-fluorobenzylamino)purine riboside, 2-(amino, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-chloro-4fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-6-methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, methylmercapto)-6-(3-chloro-2bromo, methyl or

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methylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(3-chloro-4-methylbenzylamino)purine riboside. 2-(amino. methyl or methylmercapto)-6-(5-chloro-2hydroxy, chloro, fluoro, bromo, methoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(2-chloro-4-fluorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, bromo, methyl methylmercapto)-6-(4fluoro, or chloromethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-5-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-chloro-6nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-chloro-3-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro. bromo. methyl or methylmercapto)-6-(5-chloro-2nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-bromo-4-hydroxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3,5-dibromo-4hydroxybenzylamino)purine, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-bromo-4-methoxybenzylamino)purine, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4bromomethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(4-butoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4butoxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-/t-butyl/benzylamino)purine riboside, 2-(amino, hydroxy, chloro. methyl fluoro, bromo, or methylmercapto)-6-(4-t-butyl-2,6dimethylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-aminobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-aminobenzylamino)purine riboside, 2hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4aminobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-amino-3-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-amino-4chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or

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methylmercapto)-6-(2-amino-5-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, fluoro, chloro, bromo, methyl or methylmercapto)-6-(2-amino-6chlorobenzylamino) purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3-amino-2-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, methyl methylmercapto)-6-(3-amino-4chloro. fluoro. bromo. or chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(3-amino-5-chlorobenzylamino)purine riboside, 2-(amino, bromo, methyl or methylmercapto)-6-(3-amino-6hydroxy, chloro, fluoro, chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-diamino-3-chlorobenzylamino)purine 2-(amino, riboside. hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,6-diamino-4chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-amino-3-chlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(4-amino-5or dichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl methylmercapto)-6-(5-amino-2-methylbenzylamino)purine riboside, 2-(amino, methyl or methylmercapto)-6-(2-amino-3hydroxy, chloro, fluoro, bromo, nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-amino-3-nitrobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(4-benzyloxybenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(3acetylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2-acetylbenzylamino)purine riboside, 2-(amino, hydroxy, chloro, bromo, methyl or methylmercapto)-6-(2,4.5-trichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4,5-trichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,4,6-trichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3,4trichlorobenzylamino)purine riboside, 6-(2,3,5-trichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,3,6trichlorobenzylamino)purine riboside, 2-(amino, hydroxy, chloro, fluoro, bromo, methyl or methylmercapto)-6-(2,5,6-trichlorobenzylamino)purine riboside.

3. A method of preparation of a substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, wherein R1 and R2 are as defined in claim 1, which comprises nucleophilic substitution in order to convert chlorine, bromine, fluorine, or methylmercapto group in 6 position to any other meaning of substituent N⁶, as described hereinbefore, to obtain the compound of the general formula I.

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- 4. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for use as pharmaceuticals.
- 5. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for use as growth regulators of plant, mammal, microorganisms, yeast and fungal cells.
- 6. Substitution derivatives of N⁶-benzyladenosine of the formula I according to claim 1, for use as cosmetics.
 - 7. Pharmaceuticals, cosmetics or growth regulators, which contain a compound of the general formula I or its pharmaceutically acceptable salt, including a pharmaceutical carrier.
 - 8. Use of a compound of the general formula I for preparation of affinity absorption matrices, immobilised enzymes for process control, immunoassay reagents, diagnostic samples, as well as compounds and oligonucleotides, labelled by ¹⁴C, ³H, avidin or biotin.
 - 9. Use of a compound of the general formula I according to claim 1 or its pharmaceutically acceptable salt, including a pharmaceutical carrier, for preparation of a pharmaceutical composition suitable as mitotic or antimitotic compound, especially for treating cancer, psoriasis, rheumatoid arthritis, lupus, type I diabetes, multiple sclerosis, restenosis, polycystic kidney disease, graft rejection, graft versus host disease and gout, parasitoses such as those caused by fungi or protists, or Alzheimer's disease,

or as antineurogenerative drugs, or to suppress immunostimulation or for the treatment of proliferative skin diseases.

- 10. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for use as growth regulators in agriculture, especially for increasing the yield and quality of agricultural products.
- 11. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for use as cosmetics for inhibiting ageing and senescence of mammalian epidermal cells, such as keratinocytes or fibroblasts.
- 12. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for use as growth regulators in cell cultures for the stimulation of proliferation and morphogenesis.

13. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for the preparation of a product destined for cloning of plant or mammalian embryonic cells, preferably oocytes.

14. Substitution derivatives of N⁶-benzyladenosine of the general formula I according to claim 1, for the preparation of drugs destined for suppression of immunostimulation such as arthritis or for suppression of transplant rejection in mammals.

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